

Scaled Model Technology for Flight Research of General Aviation Aircraft, Phase II

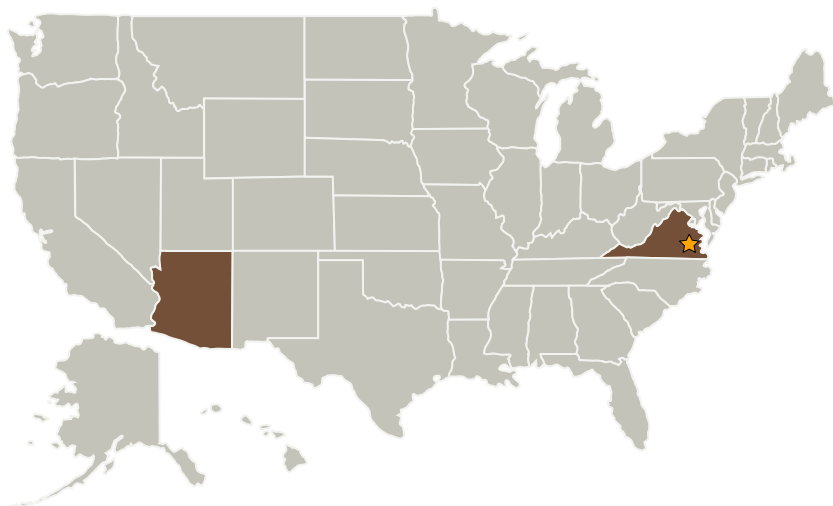
Completed Technology Project (2007 - 2009)



Project Introduction

Our proposed future Phase II activities are aimed at developing a scientifically based "tool box" for flight research using scaled models. These tools will be of great use for GA companies in the design, development, and FAA approval of future general aviation (GA) aircraft, in particular also when novel technologies such as active flow control, circulation control, etc. are being considered. We will demonstrate that time, cost, and risk associated with the development and flight testing of future GA aircraft and GA relevant technologies, can be greatly reduced by performing part of the flight research program using dynamically scaled models. As part of the proposed activities we will design, construct, and perform flight research with a 1/3 dynamically scaled model of the Cirrus SR22.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Langley Research Center (LaRC)	Lead Organization	NASA Center	Hampton, Virginia
Advanced Ceramics Research, Inc.	Supporting Organization	Industry	Tucson, Arizona



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Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Organizational Responsibility	1
Project Transitions	2
Project Management	2
Technology Areas	2

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Langley Research Center (LaRC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations

Arizona

Virginia

Project Transitions



May 2007: Project Start



May 2009: Closed out

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX15 Flight Vehicle Systems
 - └ TX15.1 Aerosciences
 - └ TX15.1.3 Aeroelasticity